CLAIMS

1. A method for performing a medical procedure, comprising:

recording geometric information at a plurality of time points in a plurality of cardiac cycles of a heart of a subject;

subsequently detecting a transient event produced at a location on the heart during a cardiac cycle;

identifying a time of occurrence of the transient event in the cardiac cycle during which the transient event occurred; and

displaying a map of the heart responsive to the identified time of occurrence and the geometric information recorded at a time point in the cardiac cycle that corresponds to the time of occurrence of the transient event.

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